Important Advances in Clinical Medicine

Epitomes of Progress—Pediatrics

The Scientific Board of the California Medical Association presents the following inventory of items of progress in pediatrics. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in pediatrics which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Pediatrics of the California Medical Association and the summaries were prepared under its direction.

Reprint requests to: Division of Scientific and Educational Activities, California Medical Association, 731 Market St., San Francisco, CA 94103

Undescended Testes—When to Treat

NORMAL TESTES, which develop from the ventral border of the urogenital ridge, descend retroperitoneally and traverse the inguinal canal to reside in the base of the scrotum. The left testis descends earlier than the right and is normally a bit lower. When testicular descent is incomplete, there is risk of decreased spermatogenesis and malignant change in the testes.

Basic to therapy is the differentiation between incomplete descent of a testis and one that is retractile. If a testis can be manipulated into the scrotum or is in the scrotum part of the time, therapy is unnecessary. In some boys the cremaster reflex is more active than usual, causing the testes to reside in the inguinal canal most of the time. When a boy approaches puberty, a retractile testis will stay in the scrotum.

If a testis cannot be manipulated into the scrotum, it is abnormal and should be treated. Medical and surgical therapy are both currently acceptable and in some cases both may be used.

Approximately 30 percent of premature infants, 3 percent of full-term infants and 0.3 percent of adults will have an undescended testis. These statistics indicate that testicular descent does occur in some patients after birth.

At approximately two years of age, patients with an undescended testis will have less than normal spermatogonia count and the tubular diameters of the testes will be below normal. Unless the patient has an associated hernia that is troublesome, treatment is best carried out between the ages of two and four years.

Medical therapy (chorionic gonadotropin) is more effective in patients who have bilateral undescended testes than in those who have a unilateral undescended testis. Successful testicular descent occurs in approximately 30 percent of patients with bilateral undescended testes and approximately 15 percent of patients with unilateral undescended testis. The side effects of therapy are enlargement of the phallus and rugosity of the scrotum. Many parents refuse medical therapy for their sons when informed of the side effects. If a testis remains undescended at the end of the therapy, a surgical procedure should be recommended.

When surgical therapy is advised primarily or after failure of medical therapy, orchidopexy, using the technique of creating a scrotal pouch between the scrotal skin and the tunica dartos, appears to be the best of the current operations. This procedure can be carried out in an outpatient surgical unit and requires no external fixation.